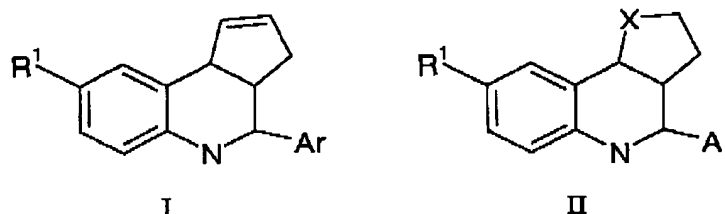


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Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Claim 1 (original) A method of treatment or prophylaxis of psychotic disorders, intellectual impairment disorders or diseases or conditions in which modulation of the $\alpha 7$ nicotinic receptor is beneficial, which method comprises administering a therapeutically-effective amount of a compound of Formula I or formula II:



wherein:

R^1 is $-OH$, $-N(R^2)_2$, $-NR^2-SO_2-R^2$, $-SO_2-N(R^2)_2$, $-CON(R^2)_2$, or $-NR^2COR^2$ where R^2 at each occurrence is independently selected from hydrogen, C_{1-4} alkyl, halogenated C_{1-4} alkyl, aryl or heteroaryl where any alkyl, halogenated-alkyl, aryl or heteroaryl moiety is substituted with 0, 1, 2 or 3 R^3 moieties;

X is O, S or CH_2 ;

Ar is a moiety selected from furyl, pyridyl, thienyl, phenyl or naphthyl, said moiety having 0, 1, 2, 3 or more R^3 substituents where R^3 is at each occurrence independently selected from hydrogen, halogen, C_{1-4} alkyl, C_{2-4} alkenyl, C_{2-4} alkynyl, OC_{1-4} alkyl, NH_2 , CO_2H , CO_2C_{1-4} alkyl, CN , NO_2 , and CF_3 ;

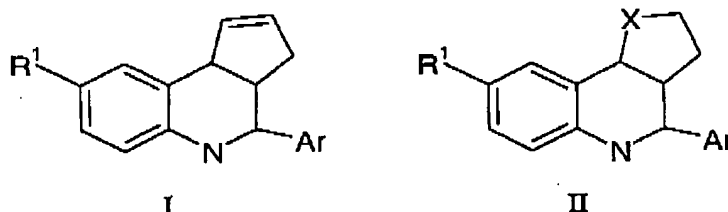
or a diastereoisomer, enantiomer or pharmaceutically-acceptable salt thereof.

Claim 2 (original) A method of treatment or prophylaxis according to Claim 1, wherein said psychotic disorder, intellectual impairment disorder or disease or condition in which modulation of the $\alpha 7$ nicotinic receptor is beneficial is selected from Alzheimer's disease, learning deficit, cognition deficit, attention deficit, memory loss, Lewy Body Dementia, Attention Deficit Hyperactivity Disorder, anxiety, schizophrenia, mania, manic depression,

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Parkinson's disease, Huntington's disease, Tourette's syndrome, a neurodegenerative disorder in which there is loss of cholinergic synapse, jetlag, nicotine addiction, pain, ulcerative colitis or irritable bowel syndrome.

Claim 3 (original) A pharmaceutical composition comprising a compound according to Formula I or Formula II



wherein:

R^1 is $-OH$, $-N(R^2)_2$, $-NR^2-SO_2-R^2$, $-SO_2-N(R^2)_2$, $-CON(R^2)_2$, or $-NR^2COR^2$ where R^2 at each occurrence is independently selected from hydrogen, C_{1-4} alkyl, halogenated C_{1-4} alkyl, aryl or heteroaryl where any alkyl, halogenated-alkyl, aryl or heteroaryl moiety is substituted with 0, 1, 2 or 3 R^3 moieties;

X is O, S or CH₂;

Ar is a moiety selected from furyl, pyridyl, thienyl, phenyl or naphthyl, said moiety having 0, 1, 2, 3 or more R³ substituents where R³ is at each occurrence independently selected from hydrogen, halogen, C₁₋₄alkyl, C₂₋₄alkenyl, C₂₋₄alkynyl, OC₁₋₄alkyl, NH₂, CO₂H, CO₂C₁₋₄alkyl, CN, NO₂, and CF₃;

or a diastereoisomer, enantiomer or pharmaceutically-acceptable salt thereof, together with at least one pharmaceutically-acceptable diluent or carrier.

Claim 4 (original) The pharmaceutical composition according to Claim 3, in addition comprising a nicotinic receptor agonist.

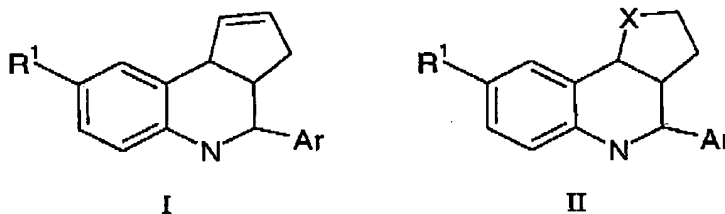
Claim 5 (currently amended) A method of treatment prophylaxis of Alzheimer's disease, learning deficit, cognition deficit, attention deficit, memory loss, Lewy Body Dementia, Attention Deficit Hyperactivity Disorder, anxiety, schizophrenia, mania, manic depression,

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Parkinson's disease, Huntington's disease, Tourette's syndrome, a neurodegenerative disorder in which there is loss of cholinergic synapse, jetlag, nicotine addiction, pain, ulcerative colitis or irritable bowel syndrome comprising administering a therapeutically-effective amount of a pharmaceutical composition according to Claim 3[[or 4]].

Claim 6 (cancelled).

Claim 7 (original) A compound of Formula I or Formula II:



wherein:

R^1 is $NR^2-SO_2-R^2$ or $-SO_2-N(R^2)_2$ where R^2 at each occurrence is independently selected from hydrogen, C_{1-4} alkyl, halogenated C_{1-4} alkyl, aryl or heteroaryl where any alkyl, halogenated-alkyl, aryl or heteroaryl moiety is substituted with 0, 1, 2 or 3 R^3 moieties;

X is O, S or CH_2 ;

Ar is a moiety selected from furyl, pyridyl, thienyl, phenyl or naphthyl, said moiety having 0, 1, 2, 3 or more R^3 substituents where R^3 is at each occurrence independently selected from hydrogen, halogen, C_{1-4} alkyl, C_{2-4} alkenyl, C_{2-4} alkynyl, OC_{1-4} alkyl, NH_2 , CO_2H , CO_2C_{1-4} alkyl, CN, NO_2 , and CF_3 ;

or a diastereoisomer, enantiomer or pharmaceutically-acceptable salt thereof.

Claim 8 (original) A compound according to Claim 7, wherein:

R^1 is $-SO_2-N(R^2)_2$ where R^2 at each occurrence is independently selected from hydrogen, C_{1-4} alkyl, halogenated C_{1-4} alkyl, aryl or heteroaryl where any alkyl, halogenated-alkyl, aryl or heteroaryl moiety is substituted with 0, 1, 2 or 3 R^3 moieties;

X is O, S or CH_2 ;

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Ar is a moiety selected from furyl, pyridyl, thienyl, phenyl or naphthyl, said moiety having 0, 1, 2, 3 or more R³ substituents where R³ is at each occurrence independently selected from hydrogen, halogen, C₁₋₄alkyl, C₂₋₄alkenyl, C₂₋₄alkynyl, OC₁₋₄alkyl, NH₂, CO₂H, CO₂C₁₋₄alkyl, CN, NO₂, and CF₃;

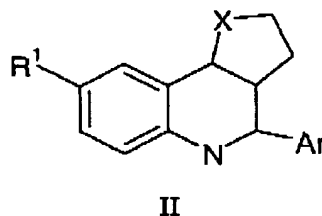
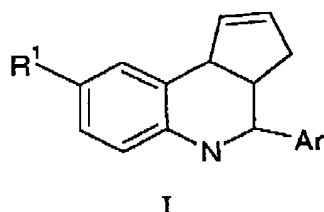
Claim 9 (original) A compound according to claim 7, said compound being:

4-(2-methylphenyl)-3a,4,5,9b-tetrahydro-3H-cyclopenta[c]quinoline-8-sulfonamide;
4-(4-methylphenyl)-3a,4,5,9b-tetrahydro-3H-cyclopenta[c]quinoline-8-sulfonamide;
4-(3,4,5-trimethoxyphenyl)-3a,4,5,9b-tetrahydro-3H-cyclopenta[c]quinoline-8-sulfonamide;
4-(2-methyl-4,5-dimethoxyphenyl)-3a,4,5,9b-tetrahydro-3H-cyclopenta[c]quinoline-8-sulfonamide;
4-(3,5-dimethoxyphenyl)-3a,4,5,9b-tetrahydro-3H-cyclopenta[c]quinoline-8-sulfonamide;
4-(4-tert-butylphenyl)-3a,4,5,9b-tetrahydro-3H-cyclopenta[c]quinoline-8-sulfonamide;
4-(2-naphthyl)-3a,4,5,9b-tetrahydro-3H-cyclopenta[c]quinoline-8-sulfonamide;
4-(4-fluorophenyl)-3a,4,5,9b-tetrahydro-3H-cyclopenta[c]quinoline-8-sulfonamide;
8-methyl-4-(4-methylphenyl)-2,3,3a,4,5,9b-hexahydro-furo[3,2-c]quinoline;
(3aR,4S,9bS)-8-methyl-4-naphthalen-2-yl-3a,4,5,9b-tetrahydro-3H-cyclopenta[c]quinoline;
(3aS,4R,9bR)-8-methyl-4-naphthalen-2-yl-3a,4,5,9b-tetrahydro-3H-cyclopenta[c]quinoline;
(3aR,4S,9bS)-4-(4-methylphenyl)-3a,4,5,9b-tetrahydro-3H-cyclopenta[c]quinoline-8-sulfonamide;
(3aS,4R,9bR)-8-methyl-4-(4-methylphenyl)-3a,4,5,9b-tetrahydro-3H-cyclopenta[c]quinoline-8-sulfonamide;
(3aS,4S,9bR)-4-(4-methylphenyl)-3a,4,5,9b-tetrahydro-3H-cyclopenta[c]quinoline-8-sulfonamide;
(3aR,4R,9bS)-4-(4-methylphenyl)-3a,4,5,9b-tetrahydro-3H-cyclopenta[c]quinoline-8-sulfonamide;
(3aR,4S,9bS)-4-(4-methylphenyl)-1,2,3a,4,5,9b-hexahydro-3H-cyclopenta[c]quinoline-8-sulfonamide or
(3aS,4R,9bR)-4-(4-methylphenyl)-1,2,3a,4,5,9b-hexahydro-3H-cyclopenta[c]quinoline-8-sulfonamide

or a pharmaceutically-acceptable salt thereof.

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Claim 10 (currently amended) A method of making a compound according to Formula I or Formula II



wherein:

R^1 is $NR^2-SO_2-R^2$ or $-SO_2-N(R^2)_2$ where R^2 at each occurrence is independently selected from hydrogen, C_{1-4} alkyl, halogenated C_{1-4} alkyl, aryl or heteroaryl where any alkyl, halogenated-alkyl, aryl or heteroaryl moiety is substituted with 0, 1, 2 or 3 R^3 moieties;

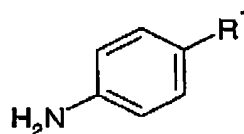
X is O, S or CH_2 ;

Ar is a moiety selected from furyl, pyridyl, thienyl, phenyl or naphthyl, said moiety having 0, 1, 2, 3 or more R^3 substituents where R^3 is at each occurrence independently selected from hydrogen, halogen, C_{1-4} alkyl, C_{2-4} alkenyl, C_{2-4} alkynyl, OC_{1-4} alkyl, NH_2 , CO_2H , CO_2C_{1-4} alkyl, CN, NO_2 , and CF_3 ;

comprising:

adding indium chloride to a solution of an arylaldehyde of formula Ar-CHO,

a 4-aminobenzenesulfonamide of the following formula



and cyclopentadiene or a compound of the following formula



in acetonitrile and stirring overnight;

neutralizing, extracting, concentrating and purifying to afford a quinoline of Formula I or Formula II.